## Claims

- 1. Apparatus for determining health effect of a selected product, or products(s) providing a selected health effect, the apparatus comprising:
- 5 a database of products and associated health effects;

an input for a user to input the selected product or selected health effect;

a processor for determining health effect of the selected product from the database and/or for determining product(s) from the database providing the selected health effect; and

an output for outputting information to the user.

- 2. Apparatus according to claim 1 further comprising weighing scales connected to the input, for weighing the selected product.
- 3. Apparatus according to claim 2 wherein the weighing scales comprise15 a user display connected to the output.
  - 4. Apparatus according to any one of the preceding claims further comprising a barcode scanner connected to the input, for scanning a barcode of the selected product.

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- 5. Apparatus according to any one of the preceding claims wherein the database comprises information on the daily consumption quantity for some or all of the products in the database, required to produce the health effect.
- 25 6. Apparatus according to any one of the preceding claims wherein the database comprises information on synergistic effects of some or all the products in the database, when combined with another product or products.

- 7. Apparatus according to any one of the preceding claims wherein the database comprises information on counterproductive effects of some or all the products in the database, when combined with another product or products.
- 8. Apparatus according to any one of the preceding claims wherein the database comprises the price of some or all the products in the database.
- 9. Apparatus according to any one of the preceding claims wherein the database comprises information on the biologically active chemical or chemicals producing the health effect in some or all the products in the database.
- 15 10. Apparatus according to claim 9 wherein the database comprises information on the CAS number of biologically active chemical(s) in the products.
- 11. Apparatus according to claim 9 or claim 10 wherein the database comprises information on the content of biologically active chemical(s) in each product.
  - 12. Apparatus according to any one of the preceding claims wherein the processor is a computer.
  - 13. Apparatus according to claim 12 wherein the database is stored on a storage device for use with the computer.
- 14. Apparatus according to claim 12 wherein the database is stored on the30 computer hard drive.

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- 15. Apparatus according to any one of claims 12 to 14 wherein the input is a computer user interface.
- 5 16. Apparatus according to any one of claims 12 to 15 wherein the output is a computer user interface.
  - 17. A method for determining health effect of a selected product, or products(s) providing a selected health effect, the method comprising the steps of:

providing a database of products and associated health effects; inputting the selected product or selected health effect into a user input; determining health effect of the selected product from the database, or product(s) from the database providing the selected health effect; and outputting information to the user.

- 18. A method according to claim 17 wherein the step of inputting comprises selecting the product or health effect from a pre-determined list.
- 20 19. A method according to claim 17 or claim 18 wherein the step of inputting comprises typing the health effect or product name.
  - 20. A method according to any one of claims 17 to 19 wherein the step of inputting the product comprises scanning a product barcode.
  - 21. A method according to any one of claims 17 to 20 wherein the step of inputting comprises inputting the weight of a product.
- 22. A method according to claim 21 wherein inputting the weight of a product is via weighing scales connected to the input.

- 23. A method according to any one of claims 17 to 22 wherein the step of inputting the product comprises inputting a chemical name.
- 5 24. A method according to any one of claims 17 to 23 wherein the step of inputting the product comprises inputting a chemical CAS number.
- 25. A method according to any one of claims 17 to 24 wherein the step of inputting the product comprises inputting information on the source of the product.
  - 26. A method according to any one of claims 17 to 25 wherein the step of providing a database of products and associated health effects, comprises providing a database including information on the daily consumption quantity for some or all of the products in the database, required to produce the health effect.
  - 27. A method according to any one of claims 17 to 26 wherein the step of providing a database of products and associated health effects, comprises providing a database including information on synergistic effects of some or all the products in the database, when combined with another product or products.
- 28. A method according to any one of claims 17 to 27 wherein the step of providing a database of products and associated health effects, comprises providing a database including information on counterproductive effects of some or all the products in the database, when combined with another product or products.

29. A method according to any one of claims 17 to 28 wherein the step of providing a database of products and associated health effects, comprises providing a database including the price of some or all the products in the database.

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- 30. A method according to any one of claims 17 to 29 wherein the step of providing a database of products and associated health effects, comprises providing a database including information on the biologically active chemical or chemicals producing the health effect in some or all the products in the database.
- 31. A method according to any one of claims 17 to 30 wherein the step of providing a database of products and associated health effects, comprises providing a database including information on the CAS number of biologically active chemical(s) in the products.
- 32. A method according to any one of claims 17 to 31 wherein the step of providing a database of products and associated health effects, comprises providing a database including information on the content of biologically active chemical(s) in each product.
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  - 33. A method of generating a database of products and associated health effects, comprising the steps of:
- a) providing a first database of products and the contents of biologically active chemicals in those products;
  - b) providing a second database of biologically active chemicals and median effective doses of those chemicals required to provide particular health effects;
  - c) selecting a product P from the first database;

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- d) from the first database, determining a biologically active chemical B in product P and the content C of biologically active chemical B in product P;
- e) from the second database, determining the median effective dose D of biologically active chemical B to provide a particular health effect H;
- f) determining the daily consumption quantity DCQ of product P required to provide health effect H, from the results at steps d) and e);
  - g) inputting product P, daily consumption quantity DCQ, biologically active chemical B, content C, median effective dose D and health effect H into a third database; and
- 10 h) repeating one or more of steps c) to g).
  - 34. Apparatus according to any one of claims 1 to 16 wherein the database is generated by the method of claim 33.
- 15 35. A method according to any one of claims 17 to 32 wherein the database is generated by the method of claim 33.
  - 36. A method for determining health effect of a selected product, or products(s) providing a selected health effect, the method comprising the steps of:

user computer means receiving an input on the selected product or selected health effect;

host computer means determining, from a database of products and associated health effects, health effect of the selected product, or product(s) providing the selected health effect; and

user computer means outputting information to a user.